

THE COMMONWEALTH OF MASSACHUSETTS  
WATER RESOURCES COMMISSION

**Request for Determination of Applicability**

**Under the Interbasin Transfer Act**

**MGL Chapter 21 Sections 8B-8D**

**Massachusetts Water Resources Authority**

**Upper Neponset Valley Relief Sewer Project**

**WRC Decision**

**May 8, 2003**

**Decision**

On May 8, 2003, the Massachusetts Water Resources Commission (WRC) decided unanimously that the Interbasin Transfer Act does not apply to the Upper Neponset Valley Relief Sewer project (UNVRS), as proposed by the Massachusetts Water Resources Authority (MWRA).

**Background**

On May 3, 2002, the WRC received a request for determination of applicability under the Interbasin Transfer Act (M.G.L. Chapter 21 §§ 8B-8D) from the MWRA for the Upper Neponset Valley Relief Sewer project (UNVRS). This request was submitted as part of the DEIR. This project will address capacity issues in the MWRA sewer line which serves Newton, Brookline, the West Roxbury section of

Boston, and Dedham in the Charles River basin. Wastewater from these communities is transported for treatment at MWRA's Deer Island facility and discharged to the Massachusetts Coastal basin.

After review of the information submitted by MWRA, the WRC requested that additional information to fully evaluate this request be provided in the FEIR for this project. This was submitted in February 2003.

This review focused only on possible increases in capacity designed to transport inflow and infiltration flows over and above the existing rates of I/I from Newton, Brookline, and Dedham, as well as any potential increases in capacity to accommodate potential increases in sanitary flows from Dedham. The reasons for this are:

- Newton and Brookline receive all of their water supply from the MWRA Water Supply System in the Chicopee and Nashua River basins. Because the source of the sanitary wastewater does not originate in the basin where the "action to increase over the present rate of interbasin transfer" is occurring, sanitary flow from within these communities is not subject to Interbasin Transfer Act review.
- Dedham receives a portion of its water supply from sources located in the Charles River basin. These are considered local sources and are subject to review under the Act.
- Boston (West Roxbury) also receives all of its water supply from the MWRA Water Supply System. In addition, any increased capacity for I/I flows from West Roxbury are not subject to review because of the intratown exemption. West Roxbury is a neighborhood located in the City of Boston. The Deer Island Treatment Plant is located in Boston. Wastewater is discharged from this plant to the Massachusetts Coastal basin. Boston has land area in the Charles River, Boston Harbor and Massachusetts Coastal basins.

## **Project Description**

The original Upper Neponset Valley Sewer (UNVS) was constructed between 1896 and 1902. It serves the communities of Brookline and Newton and portions of Dedham and Boston (West Roxbury). The UNVS is tributary to the MWRA's Wellesley Extension Sewer (WES). In 1984, the MDC, MWRA's predecessor, conducted a study of the WES and found that the tributary UNVS was hydraulically deficient.

In 1999, the MWRA began the MEPA process for the Upper Neponset Valley Relief Sewer (UNVRS), to address capacity issues within the UNVS. The existing UNVS experiences wet weather overflows into wetlands and brooks, which eventually reach the Charles River. Sections 529

through 526, which serve West Roxbury, Dedham, Brookline and Newton, are gravity fed sewers. The slope of the gravity fed sewer pipe segment determines its capacity. The segments of the pipes are of different sizes and slopes. This causes “bottlenecks” in the flow and has contributed to the overflow problems. The MWRA is proposing to replace the existing Sections 529 through 526 of the UNVS with a one pipe system that will be known as the VFW Interceptor. This will improve the efficiency of the system, thus reducing overflow events. The existing sections will be filled with concrete to prevent collapses. They will no longer be able to transport wastewater flows. Section 530, which serves portions of Brookline and Newton, will be replaced and brought up to current design standards.

Currently, the capacity of the junction of Section 526 with the WES represents the “present rate of interbasin transfer in a wastewater conveyance system”, as defined by the regulations. The MWRA has stated that the capacity of this juncture is 22.6 mgd. According to the FEIR, the junction of the VFW interceptor with the WES will be 20.56 mgd. It is expected that flows within the system will increase, due to increasing efficiency, however, the overall capacity of the system (i.e. the “ability” to transfer wastewater) will decrease. In addition, the WES has sufficient capacity to accept flows from the UNVRS.

Because the capacity of the junction of the UNVRS with the WES, as described in the FEIR, is decreasing from 22.6 mgd to 20.56 mgd and because the WES has sufficient capacity to accept all the flows from the UNVRS, **the Interbasin Transfer Act does not apply to the Upper Neponset Valley Relief Sewer project as proposed.** If in the future, the design for this project is modified or the capacity enlarged beyond what was stated in the EIR for this project, further Interbasin Transfer Act review may be warranted.